#RheumJC: Development, Implementation and Analysis of an International Twitter-Based Rheumatology Journal Club

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**Introduction**

Twitter is a social networking and microblogging service and has become an increasingly popular platform for discussion and engagement amongst healthcare professionals1. Several specialty specific journal clubs are already routinely conducted on Twitter including nephrology, urology, geriatrics, radiology and microbiology2. Here we describe the development, implementation and analysis of a rheumatology focused journal club on Twitter which utilizes the hashtag #RheumJC.

**Development**

The initial development team for #RheumJC consisted of two academic rheumatologists, two private practice rheumatologists, and an adult/peds rheumatology Fellow in Training (FIT). A companion website (www.rheumjc.com) is maintained to provide information about the journal club, a platform for discussion and engagement amongst healthcare professionals1,2. Several specialty specific twitter handles have been created to facilitate discussion1. The initial development team for #RheumJC consisted of two academic rheumatologists, two private practice rheumatologists, and an adult/peds rheumatology Fellow in Training (FIT).

**Implementation**

A needs assessment survey was conducted amongst existing Twitter users over a 2 week period to gauge interest in the initiative and to help determine the ideal format and timing of the potential journal club sessions. 61 responses were collected. The different questions and responses are presented below.

**Analysis of #RheumJC**

**Summary of first 4 journal clubs**

- In total, 131 unique individuals from 31 different countries participated in at least one #RheumJC session (Figure 5).
- While the majority of participants were rheumatologists, over 8 different medical fields were represented including nephrologists, gastroenterologists, and geriatricians.
- There were 13 FIT and other trainees amongst the participants.
- 88 individuals participated in at least 1 of the 4 journal clubs. 62% participated in all 4 sessions. 20% participated in 3 sessions, 10% participated in 2 sessions, and 8% only participated in 1 session.
- The mean number of total tweets during each of the journal clubs (full 24hrs) was 493 (385 unique tweets, 108 re-tweets) with an average of 197 (166 UT, 31 RT) during each session.

**Analysis (continued)**

A content analysis of all tweets from the four journal clubs (n=1027) was conducted with 6 coders assessing 353 tweets each (k=0.77 using Cohen’s Kappa (Appendix B)).

- The majority of the conversation was considered relevant with 28% of the tweets addressing the article directly (in the spirit of a “traditional” medical journal club) and another 21% deemed “on-topic” with tweets referencing personal experiences, opinions, and links to supporting articles.
- Analysis of the flow of tweets during a typical live session (journal club #3, session 2) revealed a natural conversation flow pattern (Figure 3).
- Tweets which were considered “on-topic but not article specific” were more likely to be re-tweeted than tweets which were article specific (p=0.02) suggesting users found value in the opinions and personal reflections of other participants.

**Follow-up Survey**

A second survey was conducted after the 4th journal club which collected 68 responses. Questions included queries about respondent demographics, participation rates in the different journal club sessions, the structure and timing of the journal clubs, and overall satisfaction with the initiative.

- Of the respondents (n=68) had participated at least one of the #RheumJC sessions.
- Of those, a significant majority (90%) were either satisfied or very satisfied with the #RheumJC initiative.
- 94% of respondents admitted that they had only observed some of the sessions and not participated in the actual discussion suggesting that the total number of #RheumJC participants could be greater than the data presented here.
- 67% of respondents indicated that the availability of the articles as open access was “important” or “very important”, without which they would have had difficulty accessing it. 80% of respondents indicated they would “likely” or “very likely” continue to participate in future sessions of #RheumJC.
- Of interest, 15% indicated they had joined Twitter solely because of #RheumJC, and another 43% stated that #RheumJC had increased their use of Twitter as a tool for medical education (Figure 4).

**Conclusions**

#RheumJC is a novel and popular approach to the traditional medical journal club which brings together people from around the globe and across specialties to discuss current medical literature in rheumatology utilizing Twitter as a medium for medical education.

**References**


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